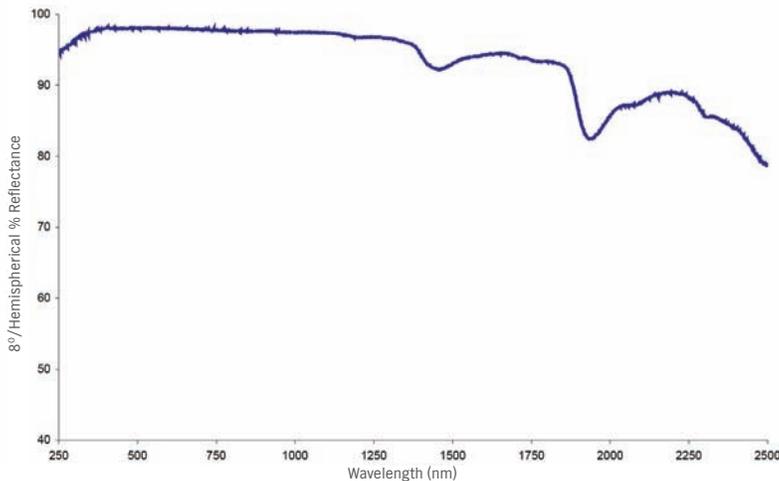


6080 WHITE REFLECTANCE COATING

A cost-effective, near-Lambertian coating for diffuse reflectance applications

TYPICAL 8°/HEMISPHERICAL REFLECTANCE - 6080 WHITE REFLECTANCE COATING



LAMBERTIAN

Labsphere's 6080 White Reflectance Coating is a diffuse white coating "paint" for reflectance applications covering the UV-VIS-NIR wavelength region. This coating is intended for customers with small-scale applications, those that require a touch-up to their original application, or those who wish to prototype components using a high-reflectance white coating. This non-luminescent coating yields reflectance values of 95 to 98% over the wavelength region from 300 to 1200 nm.

6080 is ideal for use in integrating spheres, reflectance spectrophotometers, sphere photometers, lamp housings, display backlight reflectors, optical components and other applications that call for diffuse illumination or reflectance. This coating also allows Labsphere Spectrafect® and Duraflect® coated integrating sphere systems to be touched up in-between system recalibrations and re-coatings.

APPLICATIONS:

- Flat panel displays
- Holographic imaging illuminator panels
- Integrating spheres
- Lamp housings
- Line illuminators
- Optical components
- Spectral diffuser panels

FEATURES:

- Optically stable
- High reflectance

READY-TO-USE

6080 is a barium sulfate based formulation that is easily applied by means of an airless spray gun or, for small-scale use, an airbrush. The coating can be applied to most metal, plastic, and glass surfaces that have been properly cleaned and roughened by mechanical means. Plastic surfaces require special cleaning to remove any mold release agents that may interfere with the coating adhesion. With an optimum coating thickness of 0.5 to 0.6 mm, a one-litre bottle will cover an approximate area of 2,500 cm².

The 6080 coating is created in Labsphere's dedicated coating laboratory using the highest ISO-9001: 2000 procedures and requires no additional dilution or mixing. The coating is packaged in airtight, 500 mL, one- or two-litre containers and is shipped with surface preparation and application instructions¹.

OTHER OPTIONS

The Pre-Mix 6080 is also available, requiring dilution with 200 proof Ethanol prior to use. The white reflectance coating mix is available in quantities of 250 mL or 500 mL and is shipped with dilution, surface preparation, and application instructions. With proper dilution, 250 mL of mix yields approximately 500 mL of coating and 500 mL yields approximately 1 litre of coating.



¹6080 White Reflectance Coating is considered a hazardous material. Due to shipping regulations, the coating must be shipped via Fed Ex and will incur hazardous material charges. Only the Pre-Mix is available in Europe.

Specifications

Model	Part Number	Size	Description
6080 Pre-Mix/250	AA-00525-000	250 mL	Pre-Mix White Reflectance Coating
6080 Pre-Mix/500	AA-00529-000	500 mL	Pre-Mix White Reflectance Coating
6080 Pre-Mix/1	AA-00524-000	1 liter	Pre-Mix White Reflectance Coating
6080/250	AA-00526-000	250 mL	White Reflectance Coating
6080/500	AA-00530-000	500 mL	White Reflectance Coating
6080/1	AA-00527-000	1 liter	White Reflectance Coating

Properties and Performance

Reflectance:	95-98% (see chart below)
Effective Spectral Range:	300 to 1200 nm
Thermal Stability:	to 80°C
Laser Damage Threshold:	0.9J cm ⁻²
Approximate coverage per litre of WRC-680:	2,500 cm ² (400 sq. inches) at 0.5-0.6 mm thickness

Wavelength Reflectance

(nm)	%
250	0.930
300	0.950
400	0.970
500	0.975
600	0.975
700	0.975
800	0.975
900	0.970
1000	0.965
1100	0.960
1200	0.950
1300	0.945
1400	0.930
1500	0.915
1600	0.920
1700	0.918
1800	0.910
2000	0.850
2200	0.865